

Date: Sun, 10 Apr 94 00:09:53 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #397  
To: Info-Hams

Info-Hams Digest                      Sun, 10 Apr 94                      Volume 94 : Issue    397

Today's Topics:

                    Anyone Bicycle Mobile?  
                    Callbook on line?  
        Daily Summary of Solar Geophysical Activity for 08 April  
                    Delivery Failure Report  
                    DX PacketCluster via Internet?  
        HELP: my satellite program won't work  
                    IPS Daily Report - 09 April 94  
                    Kenwood TH-78A \*OR\* Yaesu FT-530  
                    Name The New SPECTRUM Show Segment  
                    ORBS098.WEATH.AMSAT

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 10 Apr 94 04:24:57 GMT  
From: agate!ihnp4.ucsd.edu!usc!sol.ctr.columbia.edu!news.kei.com!  
newsstand.cit.cornell.edu!travelers.mail.cornell.edu!tuba.cit.cornell.edu!crux1!  
jrl2@ucbvax.berkeley.edu  
Subject: Anyone Bicycle Mobile?  
To: info-hams@ucsd.edu

Hi,

I just did some bike-mobile operation last tuesday.  
I was only biking about 5 miles but this is what I  
learned. First my setup. I have an old army ledic  
bag that I throw over my shoulder, its strap goes  
crosswise accross my chest. I put my handheld in the

bag with the antenna sticking out of the top flap but tighten the clasps down tight. I have my ht wrapped in a canvas holdere inside the bag. I attach a clip speaker mike to the shoulder strap and put the volume way up. This lets me hear nicely when other people are talking and lets me compete with wind noise when I'm talking since the mike is close to my mouth.

I thought about one of those fancy ear mikes but decided against it because.

- 1) its too easy to get hit on your bike anyway, so why add yet another reason to get distracted
- 2) too much \$\$\$\$
- 3) would probably hurt if the ht fell out or off and the ear thing got ripped out.

I have heard that if you connect your ht to your antenna with a cable between the antenna and the ht, if it falls its easier on the antenna connector, but I haven't tried it myself.

I've thought about mounting it on my handle bars but I'm worried about vibration...

hope this helps.

-Jeff N2TIQ

-----  
Date: 8 Apr 94 09:41:53 PST  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!wupost!cncis1.unl.edu!news.unomaha.edu!news.nevada.edu!hccwmv2!david@network.ucsd.edu  
Subject: Callbook on line?  
To: info-hams@ucsd.edu

Is there an online server where I can send EMail containing someones call sign and have it return their name and address? Kind of like an online Callbook?

--

|                            |                        |
|----------------------------|------------------------|
| David R. Robison           | Radio : KC7BFI         |
| VP Development             | Phone : (702) 364-8633 |
| Health Care Computer Works | Fax : (702) 364-8633   |
| Las Vegas, NV              | EMail : david@hccw.com |

-----  
Date: Sat, 9 Apr 1994 00:26:42 MDT

From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!utnut!utcsri!newsflash.concordia.ca!  
canopus.cc.umanitoba.ca!tribune.usask.ca!kakwa.ucs.ualberta.ca!  
quartz.ucs.ualberta.ca!alberta!ve6mgs!usenet@network.  
Subject: Daily Summary of Solar Geophysical Activity for 08 April  
To: info-hams@ucsd.edu

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## DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

08 APRIL, 1994

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(Based In-Part On SESC Observational Data)

### SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 08 APRIL, 1994

-----  
NOTE: Background x-ray levels remain below A1.0. Energetic electrons at  
greater than 2 MeV are remaining at high to very high levels.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 098, 04/08/94  
10.7 FLUX=072.6 90-AVG=097 SSN=011 BKI=4654 4333 BAI=031  
BGND-XRAY=A1.0 FLU1=1.7E+07 FLU10=1.1E+04 PKI=5655 5334 PAI=040  
BOU-DEV=069,173,088,040,049,024,024,021 DEV-AVG=061 NT SWF=00:000  
XRAY-MAX= B1.2 @ 1239UT XRAY-MIN= A1.0 @ 2205UT XRAY-AVG= A2.6  
NEUTN-MAX= +003% @ 1235UT NEUTN-MIN= -002% @ 0815UT NEUTN-AVG= +0.1%  
PCA-MAX= +0.1DB @ 2105UT PCA-MIN= -0.4DB @ 0505UT PCA-AVG= -0.0DB  
BOUTF-MAX=55365NT @ 0323UT BOUTF-MIN=55299NT @ 1655UT BOUTF-AVG=55320NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+071,+000,+000  
GOES6-MAX=P:+121NT@ 2001UT GOES6-MIN=N:-124NT@ 0313UT G6-AVG=+089,+027,-053  
FLUXFCST=STD:075,075,075;SESC:075,075,075 BAI/PAI-FCST=030,025,020/035,030,030  
KFCST=5555 5555 5555 5554 27DAY-AP=036,022 27DAY-KP=4465 5344 5534 3334  
WARNINGS=\*GSTRM;\*AURMIDWRN  
ALERTS==\*MINSTRM  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 07 APR 94 was 20.7.  
The Full Kp Indices for 07 APR 94 are: 5o 5+ 6- 5- 4o 3+ 3o 4-  
The 3-Hr Ap Indices for 07 APR 94 are: 49 60 67 38 30 17 15 24  
Greater than 2 MeV Electron Fluence for 08 APR is: 2.4E+09

### SYNOPSIS OF ACTIVITY

-----

Solar activity was very low. There were no events of note.

Solar activity forecast: solar activity is expected to be very low. Region 7700 (N08E72) was numbered today.

The geomagnetic field has been at unsettled to major storm levels. High latitude stations experienced severe storming for several hours. This activity is most likely due to a well positioned coronal hole. Energetic electron fluxes (GT 2 MeV) were mostly high to very high for the entire period.

Geophysical activity forecast: the geomagnetic field is expected to be at unsettled to minor storm levels for the next 24 hours then mostly unsettled to active for the remainder of the forecast period. High latitude stations are expected to have periods of minor to major storming for the entire period.

Event probabilities 09 apr-11 apr

|         |          |
|---------|----------|
| Class M | 01/01/01 |
| Class X | 01/01/01 |
| Proton  | 01/01/01 |
| PCAF    | Green    |

Geomagnetic activity probabilities 09 apr-11 apr

|                     |          |
|---------------------|----------|
| A. Middle Latitudes |          |
| Active              | 30/30/30 |
| Minor Storm         | 35/30/25 |
| Major-Severe Storm  | 15/15/15 |
| B. High Latitudes   |          |
| Active              | 30/30/30 |
| Minor Storm         | 35/30/30 |
| Major-Severe Storm  | 25/20/20 |

HF propagation conditions remain moderately to strongly disturbed over the high and polar latitudes with poor to frequent blackout (useless) conditions. Middle latitudes were below-normal with poor to occasionally very poor propagation. Low latitudes were also below-normal but did not suffer as profoundly as some of the higher latitudes. Conditions are expected to remain well below normal over the next 24 to 48 hours. Minor improvements, first with the low and middle latitudes, are expected on 11 or 12 April. Higher latitudes will require greater time to recover to near-normal values.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 08/2400Z APRIL

NMBR LOCATION LO AREA Z LL NN MAG TYPE

7700 N08E72 204 0010 HRX 01 001 ALPHA

7699 S09W44 320 PLAGE

REGIONS DUE TO RETURN 09 APRIL TO 11 APRIL

NMBR LAT LO

7692 N18 160

LISTING OF SOLAR ENERGETIC EVENTS FOR 08 APRIL, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP

NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 08 APRIL, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV

NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 08/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS

EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN

NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz

NO EVENTS OBSERVED.

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Uncorrelated: 0 0 0 0 0 0 0 0 000 ( 0.0)

Total Events: 000 optical and x-ray.

## EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

| Date                | Begin | Max   | End   | Xray  | Op | Region | Locn  | Sweeps/Optical | Observations |
|---------------------|-------|-------|-------|-------|----|--------|-------|----------------|--------------|
| -----               | ----- | ----- | ----- | ----- | -- | -----  | ----- | -----          | -----        |
| NO EVENTS OBSERVED. |       |       |       |       |    |        |       |                |              |

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

|           |                                    |
|-----------|------------------------------------|
| II        | = Type II Sweep Frequency Event    |
| III       | = Type III Sweep                   |
| IV        | = Type IV Sweep                    |
| V         | = Type V Sweep                     |
| Continuum | = Continuum Radio Event            |
| Loop      | = Loop Prominence System,          |
| Spray     | = Limb Spray,                      |
| Surge     | = Bright Limb Surge,               |
| EPL       | = Eruptive Prominence on the Limb. |

\*\* End of Daily Report \*\*

Date: 10 Apr 94 04:32:45 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Delivery Failure Report  
To: info-hams@ucsd.edu

From: NAME: Mail Postmaster  
 FUNC:  
 TEL: <POSTMASTER AT A1 AT ANDV02>  
 To: net%"Info-Hams@UCSD.EDU"@RCVAX@MRGATE

ALL-IN-1 was unable to deliver your message dated 11/11/2003 11:00 AM to  
ADAMS,SE - no such ALL-IN-1 account

on node ANDV02

The subject of the message was :  
Info-Hams Digest V94 #396

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Date: 9 Apr 1994 20:44:06 -0400  
From: ihnp4.ucsd.edu!swrinde!gatech!news.ans.net!hp81.prod.aol.net!  
search01.news.aol.com!not-for-mail@network.ucsd.edu  
Subject: DX PacketCluster via Internet?  
To: info-hams@ucsd.edu

I can't reach a cluster from my QTH. Is there a way to review recent DX spots from any cluster in the States via the Internet?

Danny AE9F/6

-----  
Date: 3 Apr 1994 15:41:09 -0700  
From: ihnp4.ucsd.edu!agate!news.ossi.com!news.fai.com!amdahl!news.hh.sbay.org!not-for-mail@network.ucsd.edu  
Subject: HELP: my satellite program won't work  
To: info-hams@ucsd.edu

Sorry if you got a duplication, I had a little problem posting to the net.

Anyway, I downloaded the program sattrack for my UNIX box at home and compiled it under linux. Everything went okay until I tried the program. The program kept on telling me that the satellites have "crashed already".

I tried AO-21, Mir and Oscar 13, they all gave me the same result, and I know, for a fact, that the satellites have not been crashed :-).

Please help me, thanks in advance.

73 de KE6BCU, Benjie

-----here are the scripts I used and the results I got back-----

Here are the lines I used for AO-21:

AO-21  
1 21087U 91006A 94069.83595116 .000000094 00000-0 82657-4 0 4439  
2 21087 82.9370 215.4726 0036191 0.5572 359.5617 13.74535665156075

Here is the line I used for Sunnyvale CA in the sites.dat file

```
Sunnyvale CA      37.283333 122.200000  50.0
```

And here is what I got from the program, running "sattrack -v"

```
wales{benjie}41: sattrack -v
```

SatTrack V1.0

```
Ground station   :      Sunnyvale CA
Satellite        :      AO-21
Element set      :      tle
Element set type :      NASA
Time zone        :      PST (-8)
Duration         :      5.0 d
Min elevation    :      48.0 deg
```

```
Ground station   <  Sunnyvale CA> : Sunnyvale CA
```

```
Ground station   :  Sunnyvale CA
Latitude         :      1.000000 deg N
Longitude        :      48.000000 deg W
Altitude         :      -49.000000 m
```

```
Satellite name   <      AO-21> : AO-21
Two-line elements <      tle> : tle
```

AO-21

```
1 21087U 91006A  94069.83595116 .00000094 00000-0 82657-4 0 4439
2 21087  82.9370 215.4726 0036191  0.5572 359.5617 13.74535665156075
```

```
Satellite name   :      AO-21
Satellite number :      21087
Element set      :      443
Epoch           :  94008.000000000 d      08-01-94  00:00:00.000 UTC
Mean anomaly     :      4.000000000 deg
Arg of perigee   :      0.000000000 deg
RAAN             :      4.000000000 deg
Inclination      :      3.000000000 deg
Eccentricity     :      0.003619100
Mean motion      :      8.000000000 rev/d
Decay rate       :      8.000000000 rev/d^2
Orbit            :      15607
```



Display Prediction Restart Quit <D> ? d

SatTrack

KE6BCU

A0-21 TRACKING MONITOR

Ground Stn : Sunnyvale CA Date: \_\_-\_\_-\_\_ Radio Beacon : 146.000 MHz  
Satellite : A0-21 Day : \_\_\_\_ Doppler Shift: -\_\_\_.\_\_\_\_ kHz  
Inclination: 3.000 deg UTC : \_\_:\_\_:\_\_ Path Loss : \_\_\_\_\_.\_\_\_\_ dB  
Orbit : \_\_\_\_\_.\_\_\_\_ % PST : \_\_:\_\_:\_\_ Phase (0-256): \_\_\_\_\_.\_\_\_\_  
Sun Azi/Ele: \_\_\_\_\_.\_\_\_\_ deg Mode (ABJLS): \_\_

Azimuth : \_\_\_\_\_.\_\_\_\_ deg Latitude N : -\_\_\_.\_\_\_\_ deg  
Elevation : -\_\_\_.\_\_\_\_ deg Longitude W : -\_\_\_\_\_.\_\_\_\_ deg  
Range : \_\_\_\_\_.\_\_\_\_ km Height : \_\_\_\_\_.\_\_\_\_ km  
Range Rate: -\_\_\_.\_\_\_\_ km/s Velocity : \_\_\_\_\_.\_\_\_\_ km/s

State Vector X: -\_\_\_\_\_.\_\_\_\_ km Y: -\_\_\_\_\_.\_\_\_\_ km Z: -\_\_\_\_\_.\_\_\_\_ km  
VX: -\_\_\_\_\_.\_\_\_\_ km/s Y: -\_\_\_\_\_.\_\_\_\_ km/s Z: -\_\_\_\_\_.\_\_\_\_ km/s

Next AOS : \_\_/\_\_:\_\_:\_\_ PST AOS Azimuth : \_\_\_\_\_.\_\_\_\_ deg \_  
Duration : \_\_/\_\_:\_\_:\_\_ MEL Azimuth : \_\_\_\_\_.\_\_\_\_ deg \_  
Next LOS : \_\_/\_\_:\_\_:\_\_ PST LOS Azimuth : \_\_\_\_\_.\_\_\_\_ deg \_  
Countdown : \_\_/\_\_:\_\_:\_\_ Max Elevation: \_\_\_\_\_.\_\_\_\_ deg

Satellite has crashed already!

--

Benjie Chen benjie@hh.sbay.org benjie@wales.sbay.org  
KE6BCU@NOARY.#NOCAL.CA.USA.NOAM KE6BCU on the air / 147.315 +.600 p1151.4  
Join Internet Amateur Mathematics Society. Email listserv@hh.sbay.org with  
"FAQ iams" in the body of the message.

-----  
Date: Sat, 9 Apr 1994 23:25:32 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!pipex!sunic!trane.uninett.no!  
nac.no!ifi.uio.no!wabbit.cc.uow.edu.au!news.ci.com.au!metro!ipso!  
rwc@network.ucsd.edu  
Subject: IPS Daily Report - 09 April 94  
To: info-hams@ucsd.edu

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT  
ISSUED AT 9/2330Z APRIL 1994 BY IPS RADIO AND SPACE SERVICES  
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.  
SUMMARY FOR 9 APRIL AND FORECAST UP TO 12 APRIL

IPS Warning 10 was issued on 31 March and is current  
for interval April 3-14 (coronal hole).

-----  
1A. SOLAR SUMMARY

Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 073/009

1B. SOLAR FORECAST

|          | 10 April      | 11 April      | 12 April      |
|----------|---------------|---------------|---------------|
| Activity | Very low      | Very low      | Very low      |
| Fadeouts | None expected | None expected | None expected |

Forecast 10.7 cm flux/Equivalent Sunspot Number : 075/013

1C. SOLAR COMMENT

None.

-----  
2A. MAGNETIC SUMMARY

Geomagnetic field at Learmonth: active to minor storm

| Estimated Indices : A | K            | Observed A Index 8 April |
|-----------------------|--------------|--------------------------|
| Learmonth             | 28 3445 4444 |                          |
| Fredericksburg        | 39           | 29                       |
| Planetary             | 44           | 40                       |

Observed Kp for 8 April: 5655 5334

2B. MAGNETIC FORECAST

| DATE   | Ap | CONDITIONS             |
|--------|----|------------------------|
| 10 Apr | 35 | Active to minor storm. |
| 11 Apr | 35 | Active to minor storm. |
| 12 Apr | 35 | Active to minor storm. |

2C. MAGNETIC COMMENT

Coronal hole induced activity currently in progress.

3A. GLOBAL HF PROPAGATION SUMMARY

|             | LATITUDE BAND |        |           |
|-------------|---------------|--------|-----------|
| DATE        | LOW           | MIDDLE | HIGH      |
| 09 Apr      | fair-normal   | fair   | poor-fair |
| PCA Event : | None.         |        |           |

3B. GLOBAL HF PROPAGATION FORECAST

|        | LATITUDE BAND |        |      |
|--------|---------------|--------|------|
| DATE   | LOW           | MIDDLE | HIGH |
| 10 Apr | fair          | poor   | poor |
| 11 Apr | fair          | poor   | poor |
| 12 Apr | fair          | poor   | poor |

#### 3C. GLOBAL HF PROPAGATION COMMENT

Fair-Poor HF comms quality expected at times over next three days.  
Conditions at high lats are expected to remain degraded  
until April 14.

#### 4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY

MUFs at Sydney were about 15% below predicted monthly values

Observed T index for 09 April: 18

Predicted Monthly T Index for April is 40.

#### 4B. AUSTRALIAN REGION IONOSPHERIC FORECAST

| DATE   | T-index | MUFs                                      |
|--------|---------|---|
| 10 Apr | 20      | 10 to 15% below predicted monthly values. |
| 11 Apr | 20      | 10 to 15% below predicted monthly values. |
| 12 Apr | 20      | 10 to 15% below predicted monthly values. |

#### 4C. AUSTRALIAN REGION COMMENT

Fair-Poor HF comms conditions expected until April 13, especially  
during local night. Depressions of 20-30% observed at Hobart.

--  
 IPS Regional Warning Centre, Sydney | IPS Radio and Space Services  
 email: rwc@ips.oz.au fax: +61 2 4148331 | PO Box 5606  
 RWC Duty Forecaster tel: +61 2 4148329 | West Chatswood NSW 2057  
 Recorded Message tel: +61 2 4148330 | AUSTRALIA

Date: 9 Apr 1994 22:01:07 GMT

From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.msfc.nasa.gov!  
 sol.ctr.columbia.edu!news.columbia.edu!namaste.cc.columbia.edu!

mrw13@network.ucsd.edu

Subject: Kenwood TH-78A \*OR\* Yaesu FT-530

To: info-hams@ucsd.edu

Has anybody tried both of the above radios and could tell me which of the two  
I should choose? I hear the Kenwood is nice and small, has a great display,  
but is a bit hard to program and does suffer from intermod problems. Please  
email any "votes" or comments. Thanks.



To: info-hams@ucsd.edu

SB KEPS @ AMSAT \$ORBS-098.W  
Orbital Elements 098.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES  
FROM WA5QGD FORT WORTH, TX April 8, 1994  
BID: \$ORBS-098.W  
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9  
Catalog number: 15427  
Epoch time: 94096.96691714  
Element set: 774  
Inclination: 99.0631 deg  
RA of node: 146.5985 deg  
Eccentricity: 0.0016149  
Arg of perigee: 62.1791 deg  
Mean anomaly: 298.1005 deg  
Mean motion: 14.13604747 rev/day  
Decay rate: 1.04e-06 rev/day<sup>2</sup>  
Epoch rev: 48028  
Checksum: 329

Satellite: NOAA-10  
Catalog number: 16969  
Epoch time: 94096.95319952  
Element set: 673  
Inclination: 98.5122 deg  
RA of node: 108.1277 deg  
Eccentricity: 0.0012929  
Arg of perigee: 173.0330 deg  
Mean anomaly: 187.1032 deg  
Mean motion: 14.24877528 rev/day  
Decay rate: 5.4e-07 rev/day<sup>2</sup>  
Epoch rev: 39246  
Checksum: 326

Satellite: MET-2/17  
Catalog number: 18820  
Epoch time: 94093.66879616  
Element set: 276  
Inclination: 82.5429 deg  
RA of node: 327.8717 deg  
Eccentricity: 0.0018087  
Arg of perigee: 33.1391 deg  
Mean anomaly: 327.0888 deg  
Mean motion: 13.84712948 rev/day

Decay rate: 7.2e-07 rev/day<sup>2</sup>  
Epoch rev: 31204  
Checksum: 340

Satellite: MET-3/2  
Catalog number: 19336  
Epoch time: 94089.83574800  
Element set: 272  
Inclination: 82.5443 deg  
RA of node: 19.1260 deg  
Eccentricity: 0.0018339  
Arg of perigee: 97.2779 deg  
Mean anomaly: 263.0433 deg  
Mean motion: 13.16965918 rev/day  
Decay rate: 5.1e-07 rev/day<sup>2</sup>  
Epoch rev: 27294  
Checksum: 324

Satellite: NOAA-11  
Catalog number: 19531  
Epoch time: 94083.23885812  
Element set: 572  
Inclination: 99.1670 deg  
RA of node: 70.0925 deg  
Eccentricity: 0.0012545  
Arg of perigee: 15.7107 deg  
Mean anomaly: 344.4450 deg  
Mean motion: 14.12969487 rev/day  
Decay rate: 6.2e-07 rev/day<sup>2</sup>  
Epoch rev: 28322  
Checksum: 300

Satellite: MET-2/18  
Catalog number: 19851  
Epoch time: 94093.77791533  
Element set: 275  
Inclination: 82.5203 deg  
RA of node: 203.2318 deg  
Eccentricity: 0.0015846  
Arg of perigee: 76.3600 deg  
Mean anomaly: 283.9325 deg  
Mean motion: 13.84360581 rev/day  
Decay rate: 7.0e-07 rev/day<sup>2</sup>  
Epoch rev: 25739  
Checksum: 316

Satellite: MET-3/3  
Catalog number: 20305

Epoch time: 94096.89802122  
Element set: 19  
Inclination: 82.5496 deg  
RA of node: 319.2682 deg  
Eccentricity: 0.0006914  
Arg of perigee: 92.4930 deg  
Mean anomaly: 267.6966 deg  
Mean motion: 13.04406356 rev/day  
Decay rate: 4.4e-07 rev/day^2  
Epoch rev: 21360  
Checksum: 303

Satellite: MET-2/19

Catalog number: 20670  
Epoch time: 94092.98290424  
Element set: 777  
Inclination: 82.5407 deg  
RA of node: 268.1974 deg  
Eccentricity: 0.0016849  
Arg of perigee: 2.5004 deg  
Mean anomaly: 357.6234 deg  
Mean motion: 13.84189785 rev/day  
Decay rate: 2.4e-07 rev/day^2  
Epoch rev: 19021  
Checksum: 326

Satellite: FY-1/2

Catalog number: 20788  
Epoch time: 94096.57359175  
Element set: 935  
Inclination: 98.8347 deg  
RA of node: 118.9912 deg  
Eccentricity: 0.0013640  
Arg of perigee: 203.7746 deg  
Mean anomaly: 156.2787 deg  
Mean motion: 14.01311548 rev/day  
Decay rate: -2.9e-07 rev/day^2  
Epoch rev: 18367  
Checksum: 340

Satellite: MET-2/20

Catalog number: 20826  
Epoch time: 94094.25698003  
Element set: 786  
Inclination: 82.5246 deg  
RA of node: 204.7890 deg  
Eccentricity: 0.0011958  
Arg of perigee: 255.0900 deg

Mean anomaly: 104.8936 deg  
Mean motion: 13.83576540 rev/day  
Decay rate: 8.0e-07 rev/day^2  
Epoch rev: 17753  
Checksum: 319

Satellite: MET-3/4  
Catalog number: 21232  
Epoch time: 94093.84087512  
Element set: 684  
Inclination: 82.5414 deg  
RA of node: 222.1406 deg  
Eccentricity: 0.0013588  
Arg of perigee: 17.3282 deg  
Mean anomaly: 342.8306 deg  
Mean motion: 13.16460528 rev/day  
Decay rate: 5.0e-07 rev/day^2  
Epoch rev: 14157  
Checksum: 280

Satellite: NOAA-12  
Catalog number: 21263  
Epoch time: 94093.55971056  
Element set: 989  
Inclination: 98.6259 deg  
RA of node: 122.9593 deg  
Eccentricity: 0.0014150  
Arg of perigee: 91.5218 deg  
Mean anomaly: 268.7581 deg  
Mean motion: 14.22387096 rev/day  
Decay rate: 1.46e-06 rev/day^2  
Epoch rev: 14992  
Checksum: 338

Satellite: MET-3/5  
Catalog number: 21655  
Epoch time: 94097.16784425  
Element set: 692  
Inclination: 82.5566 deg  
RA of node: 166.8994 deg  
Eccentricity: 0.0014492  
Arg of perigee: 19.2230 deg  
Mean anomaly: 340.9434 deg  
Mean motion: 13.16829137 rev/day  
Decay rate: 5.1e-07 rev/day^2  
Epoch rev: 12711  
Checksum: 319



Satellite: MET-2/21  
Catalog number: 22782  
Epoch time: 94093.48854630  
Element set: 286  
Inclination: 82.5455 deg  
RA of node: 265.6275 deg  
Eccentricity: 0.0023942  
Arg of perigee: 74.0584 deg  
Mean anomaly: 286.3202 deg  
Mean motion: 13.83003079 rev/day  
Decay rate: 1.5e-07 rev/day^2  
Epoch rev: 2976  
Checksum: 313

/EX

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Date: 9 Apr 1994 20:33:49 GMT  
From: koriel!newsworthy.West.Sun.COM!abyss.West.Sun.COM!spot!myers@ames.arpa  
To: info-hams@ucsd.edu

References <2nv2jr\$58o@search01.news.aol.com>,  
<Charles.R.Hohenstein.1-060494171636@mac29.hesburgh.lab.nd.edu>,  
<Cnx2HC.HBy@news.Hawaii.Edu>  
Subject : Re: Conn. Commission: ARRL Discriminates Against Gays

In article <Cnx2HC.HBy@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:

>I hope everyone has noticed that I've remained unusually quiet regarding  
>this topic... I expect a round of thanks from all of you!  
>  
>73,  
>Jeff NH6IL

I'll be the first.

Thank you, Jeff, for not starting another tirade of intolerant,  
off-topic posts to the radio groups.

: -)

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\* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are  
\*  
\* (310) 348-6043 | mine and do not necessarily \*  
\* Dana.Myers@West.Sun.Com | reflect those of my employer

\*

\* This Extra supports the abolition of the 13 and 20 WPM tests \*

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End of Info-Hams Digest V94 #397

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